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SCIENCE

FRIDAY, AUGUST 11, 1911

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THE CHEMISTRY OF ANESTHETICS¹

Idiosyncrasy has in the past accounted for—serves now to account for—unusual observations in the use of drugs, and perhaps will continue to cover much of our lack of information as to their real therapeutic action, but I am of the opinion that it is a “magic skin.”

Sacred, profane and mythological literature abound in incident, fact and fancy, showing that from earliest times man has sought to assuage grief and pain by some means of dulling consciousness. Recourse was had to the inhalation of fumes from various substances, weird incantations, application of drugs, both external and internal, pressure upon important nerves and blood vessels, and the laying on of hands, or animal magnetism. Each has played its part in the mitigation of human ills. It was not until the close of the eighteenth century, however, that modern surgical anesthesia was foreshadowed. Then it was that the discovery of hydrogen, nitrogen, oxygen and nitrous oxide—pneumatic chemistry, as it were—created a field of pneumatic medicine. In 1789, the Pneumatic Institute was founded for the purpose of investigating the “medical powers of factitious airs or gases” and was set up at Clifton by Dr. Beddoes. The immediate idea to be followed out was the treatment of phthisis and other lung troubles by inhalation of various gases. Humphry Davy was assigned the office of superintending the experiments. Davy actually inhaled nitrous oxide, and re-

¹ A lecture delivered at the general meeting of the American Chemical Society, Indianapolis, June 28, 1911.